AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims.

1. (Currently Amended) A method comprising:

~~causing, at least in part, reception of~~ receiving a location information request at a first network element, which is connected to a cellular network, from a second network element, which is connected to a packet data network, the location information request relating to a mobile station associated with the cellular network;

~~causing, at least in part, transmission of~~ determining to transmit a request to a third network element, which is connected to the packet data network, the request requesting a security document relating to the second network element;

~~initiating~~ determining to initiate establishment of at least one security association that at least specifies data origin authentication and points from the second network element to the first network element, wherein the establishment at least involves use of information comprised in the security document;

~~authenticating~~ determining to authenticate, after successful establishment of the at least one security association, a data origin of the location information request; and

~~initiating~~ determining to initiate, if the data origin of the location information request is authenticated successfully, a location procedure relating to the mobile station.

2. (Original) A method according to claim 1, wherein the security document relating to the second network element is a public key certificate, which comprises an identifier specifying the second network element and a public key of the second network element and which is cryptographically signed by the third network element.

3. (Currently Amended) A method according to claim 1, further comprising:

~~requesting~~ determining to request, from the third network element, a second security document relating to the first network element.

4. (Original) A method according to claim 3, wherein the security document comprises a first key, which is encrypted using a second key shared between the first network element and the third network element, and the second security document comprises the first key, which is encrypted using a third key shared between the second network element and the third network element.

5. (Currently Amended) A method according to claim 3, further comprising:

~~initiating~~ determining to initiate establishment of a second security association that points from the first network element to the second network element using at least information comprised in the second security document.

6. (Original) A method according to claim 5, wherein the security association is a set of Internet Security Associations pointing from the second network element to the first network element and the second security association is a second set of Internet Security Associations pointing from the first network element to the second network element.

7. (Previously Presented) A method according to claim 5, wherein the second security association at least specifies data encryption.

8. (Original) A method according to claim 1, wherein the security association is a set of Internet Security Associations pointing from the second network element to the first network element.

9. (Currently Amended) A method according to claim 1, further comprising:

~~causing, at least in part,~~ determining to generate the security document ~~to be generated~~ by the third network element, which is connected to the packet data network;

~~initiating~~ determining to initiate establishment of at least one other security association using at least information comprised in the security document, the at least one other security association at least specifying data origin authentication and pointing from the second network element to the first network element;

~~authenticating~~ determining to authenticate, after successful establishment of the at least one other security association, a data origin of the location information request; and

~~causing, at least in part,~~ determining to implement a location procedure ~~to be implemented~~, the location procedure relating to the mobile station.

10. (Currently Amended) A method according to claim 9, further comprising:

~~causing, at least in part,~~ determining to transmit location information relating to the mobile station ~~to be transmitted~~ to the second network element.

11. (Currently Amended) A method according to claim 10, wherein the location information relating to the mobile station is ~~caused, at least in part,~~ determined to be transmitted to the second network element from the first network element.

12. (Currently Amended) A method according to claim 11, further comprising:

~~causing, at least in part,~~ determining to generate a second security document ~~to be generated~~ by the third network element, the second security document relating to the first network element; and

~~initiating~~ determining to initiate establishment of a second security association using at least the information specified in the second security document, the second security association at least specifying data encryption and pointing from the first network element to the second network element.

13. (Currently Amended) A method according to claim 10, further comprising:

~~initiating~~ determining to initiate, before ~~causing, at least in part,~~ determining to transmit the location information ~~to be transmitted~~ to the second network element, establishment of a third security association, which at least specifies data origin authentication and points from the second network element to a packet data device, wherein the packet data device is either connected to the mobile station or is an integral part of the mobile station.

14. (Currently Amended) A method according to claim 10, wherein the location information relating to the mobile station is ~~caused, at least in part,~~ determined to be transmitted from a device, which is either connected to the mobile station or is an integral part of the mobile station.

15. (Currently Amended) A method according to claim 14, further comprising:

~~initiating~~ determining to initiate, before ~~causing, at least in part,~~ determining to transmit the location information ~~to be transmitted~~ to the second network element, establishment of a

third security association, which at least specifies data origin authentication and points from the second network element to a packet data device, wherein the packet data device is either connected to the mobile station or an integral part of the mobile station.

16. (Currently Amended) A method according to claim 15, further comprising:

~~initiating~~ determining to initiate, before ~~causing, at least in part, transmission of~~ determining to transmit the location information, establishment of a fourth security association, which at least specifies data encryption and which points to the second network element from the packet data device.

17. (Currently Amended) A method according to claim 14, further comprising:

~~causing, at least in part,~~ determining to receive via the mobile station ~~to receive~~ a notification relating to the location procedure associated with the mobile station,

wherein the mobile station is configured to inform the packet data device about the notification.

18. (Original) A method according to claim 1, wherein the first network element is a network element of a GPRS network.

19. (Original) A method according to claim 18, wherein the first network element is a Gateway Mobile Location Center.

20. (Original) A method according to claim 1, wherein the first network element is a network element of a UMTS network.

21. (Currently Amended) An apparatus comprising:

at least one processor; and

at least one memory including computer program code, the at least one memory and the computer program code being configured, with the at least one processor, to cause the apparatus at least to:

receive, from a packet data network, a location information request relating to a mobile station,

determine to initiate a location procedure in a cellular network,

determine to initiate establishment of security associations pointing to the apparatus from a network element of a packet data network,

determine to perform security functions specified by the security associations on data received from the packet data network,

determine if there is an existing security association pointing to the apparatus from a sender of the location information request, and

determine to initiate security association establishments, which are configured to establish security associations if security associations do not exist, wherein the security association establishments point to the apparatus from the sender of the location information request.

22. (Currently Amended) An apparatus according to claim 21, wherein the apparatus is at least further caused to:

receive, from a device reachable via the cellular network, a request about a particular security association, which points to the apparatus from a certain network element of the packet data network;

determine whether the particular security association exists; and

determine to transmit information about the particular security association to the device.

23. (Currently Amended) An apparatus according to claim 21, wherein the apparatus is at least further caused to:

receive a request to generate security documents relating to the device and to the sender of ~~a~~ the location information request; and

~~causing, at least in part,~~ determining to generate a first security document associated with the device and a second security document associated with the location information request ~~to be generated~~.

24. (Previously Presented) An apparatus according to claim 21, wherein the apparatus is a network element of a GPRS network.

25. (Previously Presented) An apparatus according to claim 24, wherein the apparatus is a Gateway Mobile Location Center.

26. (Previously Presented) An apparatus according to claim 21, wherein the apparatus is a network element of a UMTS network.

27. (Currently Amended) An apparatus comprising:

at least one processor; and

at least one memory including computer program code, the at least one memory and the computer program code being configured, with the at least one processor, to cause the apparatus at least to:

receive, from a mobile station, information relating to a location information request and a sender of the location information request, and

determine to exchange information about a security association with a network element connected to a cellular network, the security association pointing to the network element from the sender of the location information request.

28. (Currently Amended) An apparatus according to claim 27, wherein the apparatus is at least further caused to:

determine to establish a second security association, which points to the apparatus from the sender of the location information request and at least specifies data origin authentication.

29. (Currently Amended) An apparatus according to claim 28, wherein the apparatus is at least further caused to:

determine to request a network element of the cellular network to generate security documents relating to the apparatus and to the sender of the information request,

wherein the security documents are utilized to establish the second security association.

30. (Currently Amended) An apparatus according to claim 27, wherein the apparatus is at least further caused to:

determine to transmit, to the mobile station, a permission to transmit location information to the sender of the location information request,

wherein the permission is transmitted to the mobile station if the security association is established.

31. (Previously Presented) An apparatus according to claim 27, further comprising a receiver of a positioning system.

32. (Previously Presented) An apparatus according to claim 31, wherein the receiver is a Global Positioning System receiver.

33. (Canceled).

34. (Canceled).

35. (New) An apparatus comprising:

at least one processor; and

at least one memory including computer program code, the at least one memory and the computer program code being configured, with the at least one processor, to cause the apparatus at least to:

receive a location information request at a first network element, which is connected to a cellular network, from a second network element, which is connected to a packet data network, the location information request relating to a mobile station associated with the cellular network;

determine to transmit a request to a third network element, which is connected to the packet data network, the request requesting a security document relating to the second network element;

determine to initiate establishment of at least one security association that at least specifies data origin authentication and points from the second network element to

the first network element, wherein the establishment at least involves use of information comprised in the security document;

determine to authenticate, after successful establishment of the at least one security association, a data origin of the location information request; and

determine to initiate, if the data origin of the location information request is authenticated successfully, a location procedure relating to the mobile station.

36. (New) An apparatus according to claim 35, wherein the apparatus is further caused to:

determine to generate the security document by the third network element, which is connected to the packet data network;

determine to initiate establishment of at least one other security association using at least information comprised in the security document, the at least one other security association at least specifying data origin authentication and pointing from the second network element to the first network element;

determine to authenticate, after successful establishment of the at least one other security association, a data origin of the location information request; and

determine to implement a location procedure, the location procedure relating to the mobile station.